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Age-inclusive Arctic outdoor spaces: a policy review in four Nordic countries

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ABSTRACT

In the last decade, policy strategies were adopted in response to population ageing in the Nordic countries. Governmental actions have to be evaluated in terms of their efficacy. The objective of this article is to identify and review the policies related to age-inclusive outdoor spaces in the Arctic regions of Nordic countries. Our analysis focuses on central government white papers that address the older adults in Finland, Norway, Sweden, and Iceland. A review of such policy documents provides insights into the predominant understandings of older adults and healthy ageing. Moreover, such analysis may identify “blind spots” in the national policies, especially regarding the sparsely researched northernmost and rural Arctic territories. Our results demonstrate how the older populations in the Nordic Arctic and their access to outdoor spaces are addressed in the policy documents. We found that with few exceptions, the older people of the rural Arctic is strikingly absent in the Nordic national governmental papers. Moreover, access to outdoor spaces is mentioned in general terms, and specific challenges of the rural Arctic context, such as the harsh climate, long winters and geographical distances are not addressed. The noticed omissions might be the result of “urban-rural”, “south-north”, “indoor-outdoor”, and “generalisation” biases.

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KEYWORDS

Age-friendly; older individuals; rural; Finland; Norway; Sweden; Iceland

Introduction

This article has resulted from the initial consultations and continued collaboration between some of the partners in the earlier networking and research project entitled “Indigenous and non-indigenous residents of the Nordic-Russian region: Best practices for equity in healthy ageing” (NORRUS-AGE) in 2020–2022 [1].

In this review, the Nordic Arctic has been defined according to the borders of the map “Nordic Arctic Regions” (Figure 1). The countries and regions represented in the study include Finland (Northern Ostrobothnia, Kainuu, Lapland), Norway (Nordland, Troms and Finnmark), Sweden (Norrbotten, Västerbotten), and Iceland. The citizens of these territories face similar but also different challenges and opportunities depending on where they live. All included countries are welfare states based on the principle of universalism, which implies that all health and welfare services should be provided equitably to all citizens, regardless of age, gender, ethnicity, and place of residency. In all included countries, population ageing has resulted in increased pressure on the welfare states [3,4].

Country profiles

According to the typology provided by Eurostat, the Finnish, Icelandic, Norwegian, and Swedish areas of the Arctic are classified as predominantly rural areas with less than 50% of the population living in urban areas, long distances from services, and with few transport services [4,5]. Based on socio-economic analysis of rural policies in the OECD, communities with a population density below 150 inhabitants per square kilometre are classified as rural [6]. This is perhaps not the most suitable approach for the Nordic context. According to this classification, almost 90% of the population in the four Nordic countries live in rural NUTS3 regions covering 95% of the area.

Table 1 provides the indicators characterising the older population in the study regions. This is followed by a short overview of the main demographic and welfare trends of the four countries.

Finland

Finland’s population of 5.6 million (2022) is projected to remain about the same by 2040 [9]. About 0.7 million

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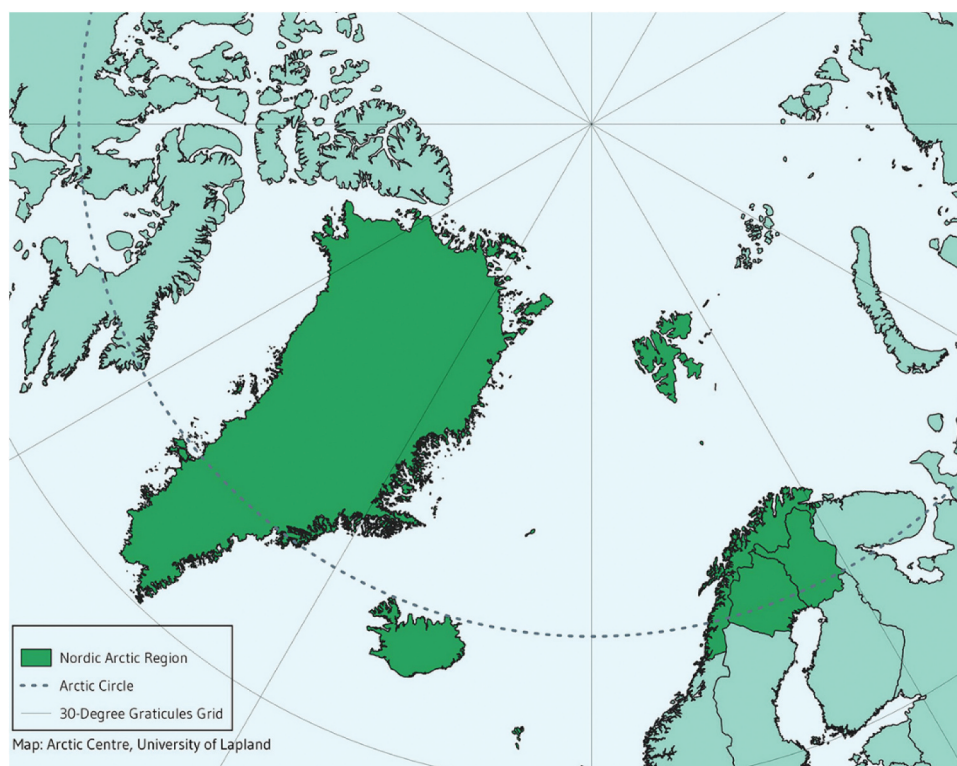


Figure 1. Nordic Arctic Regions. Map courtesy of the Arctic Centre, University of Lapland. Credit for the border data [2].

Table 1. National demographic outlooks.

	Finland	Iceland	Norway	Sweden
1.Total population (2022, mln)	5.6	0.39	5.5	10.5
2. Population by degree of urbanisation, %, 2022 Cities/town and suburbs/rural [7]	40/32/28	62/16/22	31/41/28	36/37/28
3. Median age (years) 2020/2050	43.1/47.3	37.5/45.1	39.8/44.1	41.1/43.8
4. Life expectancy at birth (years) 2015–2020 (Men/Women)	78.7/84.5	80.4/83.7	80.2/84.2	80.7/84.4
5. Life expectancy at birth 2045–2050 (Men/Women)	83.3/88.1	84.9/87.3	84.6/87.6	85.0/87.8

Sources: Indicator 1 definitions and values. National statistics [7]. Indicators 3–5 definitions and values: Ageing demographic datasheet for some unified national indicators of ageing in the recent past and projected to 2050 [8].

people out of the total population live in the three northernmost regions of Finland – North Ostrobothnia, Lapland, and Kainuu. The population has been ageing faster than anywhere else in Europe. The urbanisation has made many outlying districts nearly empty, but the more recent migratory trend is that people are relocating from small and mid-sized cities to around 10 growth centres [10]. The aim of the ageing policy set by the Ministry of Social Affairs and Health is to promote older people's functional ability, independent living, and active participation in society. Thus, social welfare for older people is made up of social and health services, and income security. Since the system is increasingly unstable, Finland seeks new ways to respond to the needs for care and support of older people with declined functional ability. Several released strategies on ageing in the latest decade have

emphasised the need to produce services for older people more innovatively and effectively to slow down the increase in social and health care costs in the coming years (Table 1). The Ministry monitors service standards through the National Supervisory Authority for Welfare and Health (Valvira) and the Regional State Administrative Agencies (AVI) to ensure harmonised nationwide guidance and direction. The Finnish Institute for Health and Welfare (THL) produces information on services for older people and their functional capacity and associated requirements [11]. Municipalities are responsible for arranging the social and health services that older people require, also in the Finnish Arctic [12–15]. A number of nationwide and local non-governmental organisations and associations contribute to the well-being of older Sámi people in collaboration with municipalities (e.g. see [16].

Iceland

All of Iceland is within the Arctic region, and therefore the whole population is living in the Arctic. Iceland has the smallest population of the countries discussed in this paper, approximately 394 000 inhabitants, but the population is growing and estimated to be just under 440 000 in 2040 [17]. The population is ageing slower than in the other Nordic countries and in the beginning of 2023, 15% were 65 years and older. The health and social services for older people are on one hand divided between state and municipalities, and on the other hand between the Ministry of Health and the Ministry of Social Affairs and Labour [18]. Health-related services and long-term care are coordinated by the state, while the social services are a municipal responsibility. In 2021, the Ministry of Health presented a report on the health policy of services for older people, which emphasised the need for a change in services based on higher living standards and more longevity [19]. Based on this report, an implementation plan called *Good to grow old* was recently presented [20]. The Ministry of Health has also introduced a plan to promote the health of older people; the aim is to support older people to maintain their functionality and health, thereby improving their quality of life and ability to live in their own homes [21]. Less than 10 of 64 municipalities have a valid/up to date formal policy on services for older people. Still, information about services for older people is available on many municipality websites. Reykjavik (the capital city) was acknowledged as an Age-Friendly city by WHO in 2015 [22], and a new city policy emphasises innovation, users' involvement, health promotion, welfare technique, prevention, and rehabilitation in daily life [23].

Norway

Norway is a country with a population of 5.5 million [24] with approximately 483 thousand residing in the northernmost regions – Nordland, Troms and Finnmark. The Norwegian population is estimated to increase slightly towards 2040 [25]. Approximately 20% of the Norwegian population resides in rural areas [26]. The northernmost part of Norway is also the traditional residential area for a major part of the Indigenous Sámi population. There is a clear tendency of younger people moving from rural to more urban areas [27] and from northern areas to the south [28]. Consequently, the average age of the population in rural and Arctic areas is relatively high. Statutory services, such as home-based care and long-term care, are a municipal responsibility. These services are regulated through national juridical acts such as the *Patient and User Rights Act* [29] and the *Health and Care Services Act*

[30], and they are funded through public block grants. However, a high degree of local autonomy exists regarding the accommodation of services to local conditions [31]. The explicit policy goal is that older adults should live and age in their own homes for as long as possible. This goal is most recently explicitly stated in the Norwegian government's "Live safely at home" reform, published in June 2023 [32].

Sweden

Sweden's population of 10.5 million (2022) is expected to increase by nearly one million by 2040. In the two northernmost regions – Norrbotten and Västerbotten, the population is approximately 530 000 on a land surface of one third of the country. These regions are also traditional residential areas for the Indigenous Sámi population. There is a trend of people, especially the younger, moving from rural settlements to more urban (especially cities with universities and colleges and more job opportunities) and to more southern and coastal areas. However, the proportion of older people above 80 years old is expected to increase in all Swedish regions and municipalities by 2040 [33]. The country is divided into 21 regional administrative parts and 290 municipalities. Care for older people is mainly the responsibility of each municipality and governed by the Social Services Act. The provision of care for older people is based on them staying in their homes as long as possible with, if needed, social care support, or in special housing facilities. For those who are particularly frail, the municipalities can provide long-term health care in people's residences. In addition, the regions are responsible for health care, ruled by the Health and Medical Service Act. By its principles and general advice, the central government, the Ministry of Health and Social Affairs, regulates the care of older people, health care, and public health [34]. The Public Health Agency of Sweden [35] highlights the necessity of cooperation between authorities, regions and municipalities, in order to reduce disparities in population health and build sustainable societies. There is also an ongoing transition within the regional health care towards equality, accessibility, and efficiency with a focus on primary care, and on individuals to be supported by effective strategies to maintain a healthy life. This shift is considered essential to meet the population's future health challenges and care needs [36].

Aims and research questions

The objective of this article is to identify and review the policies related to age-inclusive outdoor spaces in the

Arctic regions of four Nordic countries. Our analysis focuses on central government white papers that address the older adult population in Finland, Norway, Sweden, and Iceland. We consider government white papers *products* of discursively based understandings of aspects of the social world and active *producers* of understandings of practices. Moreover, government white papers are central political tools [37,38]. An analysis of such policy documents provides insights into the predominant understandings of older adults and healthy ageing, especially in the Arctic context. Moreover, an analysis of such documents may identify “omissions” or “blind spots” in the national policies. With this aim, we do not intend to suggest new policies or practical solutions but rather raise awareness regarding old age in the Arctic.

The following research questions guided the analysis:

- How are the older adult populations in the rural Arctic areas represented in the policy documents?
- How is access to outdoor spaces in rural Arctic areas addressed in the policy documents?
- How are specific challenges of the rural Arctic context addressed in the policy documents?

Vocabulary and how we define concepts such as older persons, old age, healthy ageing, ageing-in-place, age-friendly and age-inclusive environments can be found in Supplementary Material 1: Terminology context. In addition, there is the introduction to the urban-rural classification system in the Nordic countries that we adhere to.

Methods

Data collection

The authors agreed on the following inclusion criteria:

- Government white papers addressing the older adult population and/or healthy ageing, and
- Documents published within the last 15 years.

Using these criteria, the authors identified pertinent white papers by leveraging their expertise in the field and by searching the official government websites of the respective countries and municipalities. The included documents are presented in [Table 2](#).

Finland

The Ministry of Social Affairs and Health has released major provisions on how the country is going to adapt

to the ageing population. We consider it important to include the Ministry’s Socially Sustainable Finland 2020 document (SSF2020). It identifies the current aims of Finland’s social and health policy. The vision is that Finland will be a socially sustainable and vibrant society, in which equality, mental and material well-being, gender equality, and economic, social and ecological sustainability contribute to the balanced development of society [39]. Another document is the quality recommendations (QR 2020–2023) that aim to guarantee a good quality of life and effective high-quality services for all older persons who need them, which is essential to include to see whether the North or Arctic older persons are represented there because the proposed measures lay the foundation for an age-friendly society [41]. The current quality recommendation supports the implementation of the Act on Supporting the Functional Capacity of the Older Population and on Social and Health Services for Older Persons [47], the changes made to it, and the policies of the government programme. The newest Finnish National Programme on Ageing 2030: For an age-competent Finland (FNPA 2030) was included as it discusses the cross-administrative measures of the programme on ageing, and describes the factors related to ageing and the anticipated changes in the operating environment via six areas: improve functional ability; extend the functional ability and working careers of older working-age people; increase and enable voluntary work; ensure the equality, more efficient coordination and economic sustainability of services for older people; increase the age-friendliness of housing and residential environments; and highlight the development and utilisation of Finnish technology for ageing [40].

Iceland

In Iceland, two white papers have been published recently on services for older people: one on health promotion and the other one on integrated short- and long-term services. These two papers were selected since both address the older population and are a part of governmental policies. The plan of implementation for health promotion of older people was based on a report from a team of specialists [48] and was published in August 2021 [21]. The aim is to have a formal collaboration between the state and the municipalities on health promotion of older people. The plan includes six main subjects: cooperation in health promotion; data, analysis, and public health indicators; education and health literacy, function and well-being; nutrition; and conditions and environment.

Table 2. National documents related to healthy ageing (countries in alphabetical order).

No	Country	Document in native language [in English] and a reference	Responsible ministry	Year published
1	FIN	Sosiaalisesiti kestävä Suomi 2020 – Sosiaali- ja terveystieteiden strategia [Socially sustainable Finland 2020. Strategy for social and health policy] [39]	Finland's Ministry of Social Affairs and Health	2011
2	FIN	Kansallinen ikäohjelma vuoteen 2030: Tavoitteena ikäkyvykäs Suomi [National Programme on Ageing 2030: For an age-competent Finland] [40]	Finland's Ministry of Social Affairs and Health	2020
3	FIN	Laatusuositus hyvän ikääntymisen turvaamiseksi ja palvelujen parantamiseksi 2020–2023: Tavoitteena ikäystävällinen Suomi [Quality recommendation to guarantee a good quality of life and improved services for older persons 2020–2023: The Aim is an Age-friendly Finland] [41]	Finland's Ministry of Social Affairs and Health	2020
4	ICE	Gott að eldast – aðgerðáætlun um þjónustu við eldra fólk [Good to grow old. Outlines of a plan of implementation of services for older people over the next four years] (Iceland's Ministry of Health and Ministry of Social Affairs and Labour 2022)	Iceland's Ministry of Health and Ministry of Social Affairs and Labour	2022
5	ICE	Virðing og resin. Samþætt heilbrigðis- og félagsþjónusta fyrir eldra fólk [Respect and dignity. Integrated health- and social services for older people. Outlines of a policy of health services for older people] [19]	Iceland's Ministry of Health	2021
6	ICE	Heilsuefling aldraðra - Aðgerðáætlun [Health promotion for older people – Action plan] (Iceland's Ministry of Health 2021) [21]	Iceland's Ministry of Health	2021
7	ICE	Heilsuefling aldraðra - Skýrsla starfshóps [Health promotion for older people - a team report] (Iceland's Ministry of Health and Matthíasdóttir 2021) [42]	Iceland's Ministry of Health	2021
8	NO	Meld. St. 15 (2017–2018) Leve hele livet – En kvalitetsreform for eldre [A Full Life – All Your Life – A Quality Reform for Older Persons] [43]	Ministry of Health and Care Services	2019
9	NO	Meld. St. 19 (2018–2019) Folkehelsemeldinga. Gode liv i eit trygt samfunn [Report to the Storting. Public Health Report. Good Lives in a Safe Society] [44]	Ministry of Health and Care Services	2019
10	NO	Flere år – flere muligheter. Regjeringens strategi for et aldersvennlig samfunn [More years – More opportunities. The Government's strategy for an age-friendly society] [45]	Government of Norway	2016
11	SE	Vård och omsorg för äldre. Lägesrapport 2022 [Care and service for older people. Status report 2022] (The Swedish National Board of Health and Welfare 2022) [49]	The Swedish National Board of Health and Welfare	2022
12	SE	Läs mig! Nationell kvalitetsplan för vård och omsorg för äldre personer. SOU 2017:21 [Read me! National quality plan for care and social services for older people] [46]	Government Offices of Sweden	2017
13	SE	På väg mot en god och jämlik hälsa. Stödstruktur för det statliga folkhälsoarbetet [On the way to good and equal health: Support structure for government public health work] [35]	The Public Health Agency of Sweden	2020

Note: FIN- Finland, ICE- Iceland, NO- Norway, SE- Sweden.

A plan of implementation of services for older people over the next four years (2023–2027) was presented in December 2022 [20]. This plan was based on the outlines by Guðmundsson [19] on integrated health and social services for older people. This plan is now in the consultation process and is expected to be submitted to the Parliament in the spring of 2023. The slogan *Good to grow old* summarised the main purpose – it should be good to grow old in Iceland. People should look forward to growing older, and the last decades should be among the best days of their lives. The aim is to ensure appropriate services, whether it is home services by municipalities or health care services. The services should be there when needed, based on the individuals' preferences and at the right service level.

Norway

Two of the Norwegian government white papers included in the analysis are Reports to the Storting (Parliament), *Stortingsmeldinger*, that is, documents that are the government's report to the Parliament on the work conducted in a particular field, and they often form the basis of a draft resolution or bill at a later

stage. The first document was included because it addresses the older adult population [43], whereas the second document was included because it addresses public health issues [44]. The third included Norwegian government white paper is a *government strategy* [45]. Strategies are a type of document usually produced and issued by the ministries or the Prime Minister's office [49]. In June 2023, the Norwegian government launched the "Live safely at home" reform [32], building on Meld. St. 15 (2017–2018) [43]. This reform was not yet published when the analysis for this article was conducted, and thus it is not included in our data material.

Sweden

The National Board of Health and Welfare [50] analyses and reports the status and development of care and service for citizens 65 years and above. This document was included because it connects to the ongoing transitions in care and service and provides a snapshot of the current challenges municipalities are facing. The second paper included is a report of the inquiry into a national quality plan for older people's care published by the Swedish government [46]. The focus in this paper is on

the municipalities' care and concern for older people, and it also has a health promotion and preventive approach for the actions planned. Thirdly, a national paper on the public health policy framework is included [35]. It consists of an overall national goal and eight prioritised target areas; one of those, target 5, addresses accommodation and local environment. The overall goal is clearly focused on creating societal conditions for good and equal health for the entire population.

Data analysis

The analysis was an iterative process involving the reading of the included texts guided by the research questions, and discussions among the authors. Initially, the authors from each country read the government white papers from our respective countries several times to obtain an overall impression. We then scanned the individual documents for passages focusing specifically on rural Arctic older adult populations and outdoor spaces. Passages and statements in the texts that appeared to be relevant were highlighted. Finally, the authors from the four countries presented their findings to each other and identified similarities and differences in and between the policy documents. In this process, we were conscious to identify potential "omissions" or "blind spots" in the national policies.

We have strived to make the review interpretively rigorous through the extensive use of quotations from the included documents. All quotes were translated into English by the authors as literally as possible. The authors take full responsibility for any potential misrepresentations in the translated quotes. The document languages were a barrier for researcher triangulation as all authors could not read all the original texts. The working language in the analysis and discussions was English, which may have caused the loss of nuances.

Results

Representations of the older adult population in the rural Arctic areas

Finland

There is no specific mention of the Arctic areas in the included white papers from Finland. The comprehensive paper on ageing FNPA 2030 states that "The situation with population ageing is already fairly poor in some regions, particularly those with smaller populations and the regions of Eastern and Northern Finland" [40] p.16). With regard to how the older adult populations in the rural Arctic areas are represented, Section 2.3. Urbanisation states, "The decline in rural

population results in a decline in infrastructure, including the economic foundation for maintaining road, water supply and telecommunications networks, which poses major challenges for rural development" without highlighting the Arctic areas. It suggests the attractiveness of rural areas can be increased by means of high-speed telecommunications connections and well-functioning services [40] p.19).

The SSF2020 strategy has no mention of the terms "rural", "Arctic", "northern", or "sparsely" and does not discuss any specifics about older adult populations in the rural Arctic areas of Finland. However, SSF2020 identifies population ageing as a "challenge for the sustainability of public finances" and states that "demographic and regional diversification threatens to continue to increase" as one of the challenges and opportunities for Finland of the 2010s [39] p.5).

The Finnish QR 2020–2023 recognises the needs of older adult populations in the rural areas, stating that "the functional capacity of older people is also promoted through services, which support mobility both in the city and in sparsely populated areas (rural areas)" [41] p.41). Chapter 7.1.3, Good practices, highlights one case from the northernmost area of Finland – Lapland. It describes the diverse forms of support for living at home in the functional home care handbook [41].

Iceland

In the two plans on integrated health and social services and health promotion, there is no specific mention of rural areas. However, an increase in remote services to enable services all over the country is addressed [20]. In the outlines of a policy of health services for older people in Iceland [19], some aims touch upon the place of residence and therefore, indirectly, regard the rural areas: (1) increase the use of the welfare technique in all services and establish a welfare technique centre in each health district; (2) facilitate integrated and comprehensive individual services in all administrative parts of the country; and (3) establish more interdisciplinary profession teams that serve the rural areas and conduct preventive home visits. In the plan of health promotion [21], one of the aims is to address health promotion and activity for older people in communities within each administrative part of the country.

Norway

In the Norwegian government white paper *A Full Life – All Your Life* [43], an entire chapter is dedicated to demographic changes (Chapter 2.5). The chapter addresses the ageing of the Norwegian population towards 2050, the potential consequences of the expected relative drop in

the proportion of the working population (aged 16–66) compared to the age group 67+, and the drop in the UN family caregiving coefficient for public health and care services and family care. A short paragraph is dedicated to regional variations: “... the increase in the number of older adults will be unequally distributed among the municipalities due to large geographical variations in the ageing of the population. This will perhaps be the most significant demographic challenge for Norway” (p.42).

Moreover, it is noted that “the ageing of the population will be strongest and fastest in the rural areas. In 2040, more than every third citizen in rural municipalities will be 65 years or older” (p.53). A similar message is communicated in both the *Public Health Report* [44] and in *More Years – More Opportunities* [45]. The demographic changes in the Arctic areas are not mentioned explicitly in any of the included Norwegian white papers. However, it is noted that the ageing of the population will be most profound “in counties where older adults have the lowest levels of education and less economic resources, whereas the most resourceful older adults live in the counties with the lowest ageing of the population” [43] p.54). This concern is also presented in the *Public Health Report*: “there are geographical variations in the increased percentage of older adults”, and “the municipalities with the highest percentage of older adults will have an older adult population with the poorest resources” [44] p.17). Historically, the education level has been lower in the northernmost counties of Norway. This is, however, not addressed explicitly in the included Norwegian white papers.

Sweden

Both the *Status report* [50] and the *National quality plan* [46] address the demographic challenges of an increasing number of children, youths and older people, while people of working age are too few in comparison. The number of people over 80 years old is expected to increase from today's 510 000 to 900 000 in 2040. These challenges are also noted in the *National public health strategy* [35]. The population ageing will be more pronounced in rural and distant areas of the country [35]. The introduction of the *National quality plan* [46] acknowledges that diversity is the norm among older people. This diversity stems from varied life courses influenced by factors such as gender, education, income, and geographical locations. Additionally, there are disparities in health and life expectancy among older adults.

Access to outdoor spaces in rural Arctic areas

Finland

According to the SSF2020 strategy, customer-oriented services and obstacle-free environments, including

those for different ages, are viable to arrange the access to welfare for all in Finland: “Independent living, functional capacity and participation of older people will be primarily supported in their own living environment, with the assistance of new technology. The starting point here is available, equitable, effective and customer-oriented services” [39] p.10). “Sustainable housing design and community planning contribute to safety and independent coping, reduce the incidence of many social problems and prevent segregation of housing districts. An obstacle-free environment will be created by developing the community structure, ensuring ease of access and the availability of services” [39] p.15).

Further, in the national FNPA 2030 programme, the government notes that the housing and living environments must be age-friendly. It admits that large and small municipalities and urban areas and sparsely populated areas are in a very different situation. There is no specific mention of the Arctic, though. “Many rural municipalities have a high number of older people and have a need to support their housing in different ways. In the future, an increasing share of the older population will live in urban areas, mainly in regular housing” [40] p.42).

The QR 2020–2023 title reads “The Aim is an Age-friendly Finland”. In chapter six “Housing and living environments are age-friendly” it is pointed out that physical accessibility of the living environment is a prerequisite for everyday activities and inclusion. “The creation of living environments which support the well-being of older residents involves a variety of factors. These include improving housing stock, various housing options, physical and social factors in the living environment, and transport solutions” [41] p.38). Chapter 4 highlights the need for volunteers working with older people to promote their well-being and good health, for instance, by leading exercise groups, outdoor activities or other hobby groups, or by providing instructions for the use of digital tools and services [41] p.28). The recommendations, however, give no specific direction to the rural/Arctic settings, in general anticipating that the “housing needs of older people will be included in the municipal plan for supporting the older population as required by the Act on the Care Services for Older Persons” [41] p.42).

Iceland

Rural outdoor spaces are not addressed specifically in the two white papers. However, it is emphasised that “housing and outer environment” should meet the needs of the older people and be adjusted to support the older adult to live in his/her home as long as

possible, regardless of location [21]. In the definition of age-friendly cities, the main focus regarding outdoor spaces is to increase the quality of life of older people by e.g. improving transportation, enhancing the possibility of outdoor activities with an improved system of walkways and heated walkways, vegetation for decoration and to give shelter from the wind, benches to rest on, and good and affordable access to fitness facilities and swimming pools [22].

Norway

In *A Full Life – All Your Life*, a chapter is dedicated to age-friendly societies (Chapter 4). An age-friendly society or community is defined as “an inclusive and accessible environment that promotes active ageing” [43] p.70). The close association between age-friendliness and “active ageing” is also expressed in the *Public Health Report* which states “an age-friendly society includes measures to stimulate activity and coping” [44] p.20). In *More Years – More Opportunities*, age-friendliness is not only associated with “active ageing” but also “healthy ageing”: “The vision of the strategy is that all Norwegians will live long and meaningful lives with active and healthy ageing” [45] p.8).

A Full Life – All Your Life refers to the UN indicators for age-friendliness, among those, outdoor spaces and architecture [43] p.71). A programme for “an age-friendly Norway” was launched [43] p.72), in which older adults’ “responsibility for maintaining their functional level through active lives” is emphasised [43] p.74). In this part of the document, we identified three examples related to outdoor spaces from the northern part of Norway, that is, outdoor walking groups for older adults in the Vestvågøy municipality, Nordland county [43], p.87), “Skånlandstrimmen”, “...a low-threshold exercise for the population in Skånland municipality where people can walk, jog, cycle, use wheelchairs, or get around in other ways” in Troms county [43] p.93), and an outdoor space for Indigenous Sami older people with dementia close to the nursing home in Karasjok municipality in Finnmark county [43] p.138). In the *Public Health Report*, access to “attractive green spaces” is emphasised as particularly important for “children, pregnant persons, older adults, and people in vulnerable areas with limited economic resources” [44] p.67). Particular attention is given to access to green spaces in urban areas as “82% of the Norwegian population reside in cities and urban centres” [44] p.69), and rural and/or Arctic areas are not mentioned. In the *More Years – More Opportunities* strategy, a chapter is dedicated to age-friendly environments and communities (Chapter 4). It is stated that “accessibility should be the basis for all community and space planning to

make it easier for all groups to stay active” [45] p.22), and “the goal is that everyone should have access to trails of hiking areas less than 500 metres from their homes” [45] p.27). No references are made to rural and/or Arctic areas in the strategy.

Sweden

The overarching goal of the *National public health strategy* [35] is to create societal conditions for good and equal health for the entire population, create a good and accessible local environment, and the strategy highlights the need for design and planning for community walking (target area five, housing and living environment and target six, lifestyle habits). The policy links to the UN global target 11 on access to safe, inclusive, and accessible public spaces and parks for all, especially older persons, and to other national targets described in general terms.

The national quality plan [46] states that the municipality has a clear responsibility to make it easier for older people to be physically and socially active and participate in community life. Further, the plan clearly states that the living environment is the key factor for success. When it comes to making public spaces and transport accessible, the plan addresses this differently for urban and rural areas: “In the urban area, it can be, for example, bevelled sidewalks, safe walking paths, and proximity to services. In rural and sparsely populated areas, various forms of service and public transport enable the older persons to be able to fend for themselves even if they can no longer drive or want to drive” [46] p.478).

The national quality plan [46] and *the status report* [50] address the importance of promoting equal opportunities for physical activity by providing walkways and other opportunities to exercise. That is, community planning for safe, accessible, and inspiring public spaces. Besides these notes, these two documents focused entirely on the provision of care and services in terms of housing, indoor spaces, and activities and care provided in the place of residence of older people. Safety is addressed here in terms of indoor residential space: “those who feel insecure and isolated staying in their home in the villa or usual apartment with shared stairwell despite well-functioning home care and home health care should be granted a place in special accommodation” [50] p.673).

Specific challenges of the rural Arctic context

Finland

In the included Finnish white papers, there was no specific addressing of regional differences (e.g. Northern vs Southern Finland).

Iceland

In the two white papers, the discussion of the older adult population is general. The outlines of the integrated services address the need for increased remote services for those who live far from health and social services. The biggest challenge mentioned, though not specifically for the rural areas, is the estimated change of the population in Iceland as longevity increases. Opportunities are also presented in that context – the older population is not presented as only a burden to society. For that purpose, the Ministry of Social and Labour Affairs and the Ministry of Health have set up an interactive webpage to show the actual worth and cost of the older population (Ministry of Social and Labour Affairs and the Ministry of Health of Iceland 2023) [59].

Norway

With the exception of the three above-mentioned examples from Vestvågøy, Skånland and Karasjok in *A Full Life – All Your Life*, the older adult population of the rural Arctic is strikingly absent in the included Norwegian white papers. Moreover, access to outdoor spaces is mentioned in general terms, and specific challenges of the rural Arctic context, such as the harsh climate, long and dark winters, and long geographical distances are not addressed.

Sweden

The ageing population and challenges with insufficient staff resources in care and services for older people are mentioned in all included papers. Only the *National quality plan* [46] mentions additional challenges related to geography. It is proposed that welfare technology can offer opportunities to better handle the different conditions and challenges for older age care in sparsely populated areas and larger urban areas. However, there are differences in supply as well as access (especially in sparsely populated areas) to broadband and stable mobile networks. The national plan further highlights the need for cultural and linguistic adapted care and services, such as a need to map “possible differences in aid to special housing, e.g. women, men, socio-economic conditions, ethnicity, LGBTQ, disability, and if one belongs to the Sámi people or other national minorities” [46] p.675). This, in turn, builds on the directives on human rights and equal care. It is stressed that these directions and services would be beneficial to the Sámi people and other national minorities. The need to map older people’s opportunities for social activities and togetherness in sparsely populated areas is also highlighted. Moreover, the importance of decision

makers’ knowledge about conditions in different parts of the country is emphasised. Such initiatives would reduce disparities between the regions in the country [46].

Discussion and concluding remarks

This policy review presented findings on how older adult populations and their access to outdoor spaces in the rural Arctic areas are represented in policy documents. Drawing upon iterative document analysis of relevant white papers from Finland, Iceland, Norway, and Sweden and an interdisciplinary body of literature (e.g [51–55], we have examined whether and how the Arctic Nordic north and the situation for its rural older residents are represented and included in the national policy agendas.

Our results demonstrate some omissions or blind spots in the Nordic national policies. We suggest that these omissions are related to four implicit, perhaps unintentional biases. The first bias regards the “urban-rural” dimension. Our results demonstrate that the national policies are focused on the well-being of older adults living in cities and urban centres. At best, “rural” and “remote” territories are mentioned but not in the Arctic parts specifically. The second bias regards the “south-north” dimension. Significantly more examples and cases are drawn from southern areas of the Nordic countries, and examples of best practices and local initiatives from the northern territories are few. Moreover, although sparsely populated areas are mentioned, there are few annotations about potential differences between the sparsely populated areas in the south and in the north. The third bias regards the “indoor-outdoor” dimension. Although the ideal of ageing in place is evident in all four countries’ policies, considerably more attention is devoted to older adults’ homes and indoor communal spaces than to outdoor living environments. This imbalance might signal a stereotyped view of older adults as mainly living their lives within the confinement of their own homes. The fourth bias regards inherent assumptions about the older adult population as a homogeneous group with similar needs. The diversity and heterogeneity of the older adult population is somewhat mentioned in the included documents, but how this intersects with other dimensions, such as outdoor space, Arctic residents, the urban-rural and the south-north, remains unaddressed.

The National Programme on Ageing 2030 is the only Finnish document that mentions the heterogeneity issue: “As pensioners do not constitute a homogenous group, the things they find meaningful and valuable can vary considerably. There are major socio-economic

differences among pensioners” (p.24 [40]. The Swedish National Quality Plan [46] mentions diversity among older adults in many aspects, e.g. socio-economical aspects, ethnicity, and gender. It was especially highlighted that more knowledge and attention to diversity are needed to obtain equality in care and special housing and reduce regional disparities. The Norwegian white paper *A Full Life – All Your Life*, highlights diversity primarily in relation to immigrants, noting that while only 4% of Norwegians aged 70 or older are immigrants no, this is expected to rise to 15% in 30 years [43] p.34). It also touches on cultural, religious, and existential diversity, mentioning that caregivers in assisted living and nursing homes (p.83). However, the paper scarcely addresses diversity among older adults in the Arctic or their engagement with outdoor spaces, except for a mention of the Sami population. The discussion is mostly limited to language, culture, tradition, food, and illness perceptions, with the “Sami yard” in Karasjok municipality being the sole example of an outdoor space designed for activities for Sami older adults living with dementia (p.138). In the Icelandic documents, the term “older people” is mainly used without addressing that it is a very heterogeneous group.

These four biases are evident in the policies of all the four Nordic countries and can intensify geographical inequities. We suggest that these biases call for theorising of how old age is shaped by geographical and material circumstances, and how the geographical context of ageing and place of residence impact older adults’ opportunities for healthy ageing. Moreover, while older adults are often addressed as a policy issue for health care and social care, we suggest that the creation of age-inclusive communities should be included in policies on a wide spectrum of public areas and should involve all relevant stakeholders, including older people themselves.

The Icelandic population differs from the other Nordic populations in two ways. The older population of rural areas in Iceland is decreasing. In 2023, 6% of the older population live in rural areas compared to 8.3% in 2000 [56]. Older people tend to move closer to the services and/or their children who live in urban areas. Moreover, Iceland has no indigenous populations [57]. Therefore, the population of Iceland might be historically more homogeneous than the other Nordic countries. At the same time, the increase in the general population is largely based on immigration [58]. More diversity in the older population should thus be expected in the coming years.

We acknowledge that national policy papers are under continuous development and, as such, national

policies covering the blind spots identified in this article may be upcoming. Also, the omissions identified in our analysis suggest that national authorities in the Nordic countries might view issues arising from local differences as the responsibility of regional authorities.

Moreover, we acknowledge that government papers on other political areas could address the issues of older adults, outdoor spaces, and rural Arctic areas directly or indirectly. For instance, a report from the Swedish public health authority discusses the health impact of climate change in the North, including a heightened risk of accidents from ice formation and slipping. This is attributed to the rising number of days with temperatures oscillating above and below the freezing point, as well as periods of extreme cold or heat. The vulnerability of the older population in relation to outdoor spaces is particularly highlighted in these aspects [60]. Similarly, a regional plan specifies that long cold and dark seasons with the covering of the terrain with ice and snow can restrict older people’s mobility. The plan highlights the importance of well-lit spaces and well-maintained and connected cycle paths and walkways, parks and public spaces [61].

Our goal was not to analyse the reasons behind these omissions and biases, nor to propose new policies or practical solutions. Rather, we call for avoidance of such omissions in future policy documents to enhance our comprehension and support of age-inclusive environments in the rural northern regions of Nordic countries. Moreover, we encourage local authorities to be aware of the omissions in national policies when developing local policies promoting age-inclusive rural Arctic communities. Our results highlight the necessity of a new approach that thoroughly evaluates the assets, strengths, opportunities, and territorial challenges of rural Arctic regions. This approach should also consider the various factors of resilience and vulnerability in these areas, which have not been adequately addressed to date. It is crucial to include the rural Arctic areas in future government white papers. This inclusion is crucial not only to prepare for challenges associated with population ageing, but also for anticipating and responding to other potential events and challenges including pandemics, changes in climate and environment, and biodiversity loss.

Future studies should seek to further explore region-specific health, environmental, cultural, demographic, and other societal challenges of the Arctic regions. Identifying local initiatives and promising practices could create more opportunities for older adults in the rural Arctic to engage in outdoor activities. Such interventions may be particularly valuable in the areas with the longest darkness/winters and during pandemics

such as the COVID-19. Moreover, access to outdoor activities and age-inclusive spaces may increase inter-generational contact, reduce physical and mental health problems, and support the resilience and thriving of Arctic Nordic rural residents.

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Ethical standards

Ethical approval was not required.

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